Lab Showcases Computing Research at SC99

The SC conference series is an absolute must if you're into high-performance computing. The series is organized for and targets the high-end computing community. The annual series event, this year called SC99, showcases the very best scientific computing research going on in the Department of Energy, the National Science Foundation and universities around the country.

The conference focuses on high-performance communication and state-of-the-art parallel computing. DOE research labs participate in the supercomputing conference, and Ames Lab is no exception. Several members of the Scalable Computing Lab traveled to Portland, Ore., Nov. 13-19 for SC99.

"The SC conference series is an investment," says David Halstead, associate scientist and SC99 executive committee member. "It's the one meeting of the year where all the labs show up to exhibit their current, ongoing research. Because of

that, most of the technology coordinators and directors for the DOE Office of Advanced Scientific Computing Research are also there, holding meetings with principal investigators and discussing what's been going on. Hopefully, we get funding at the end of the day," Halstead adds.

The SCL exhibited its research on Gigabit network connectivity at SC99. The group has been working on the research in collaboration with IBM, Syskonnect and Packet Engines. "We've demonstrated leading-edge performance on the IBM Gigabit hardware and are achieving much better through-put on Gigabit Ethernet than most other vendors are currently seeing," says Brett Bode, assistant scientist.
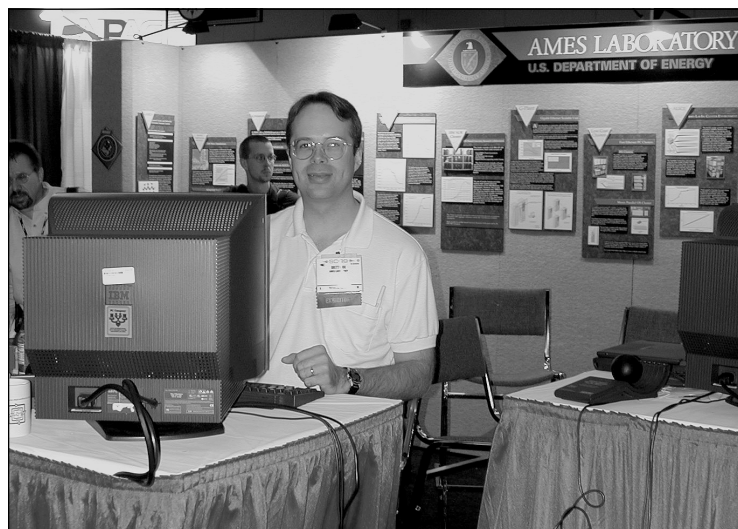
"The SC conference series provides opportunities for making contacts with computer hardware and software vendors, as well as with researchers from other labs," Bode continues, noting that other perks include being able to

explore new collaboration possibilities and firm up existing collaborations. "Most of the network interconnect and high-end computing vendors are there, so you can discover what's coming out in the next 12-24 months and tune your research strategy."

According to Halstead, it's vital to attend this conference to be aware of what it takes to compete in the marketplace and be useful to the other DOE labs. "The first thing for them to know is that you are a player in the high-performance computing game," he says. "One of the major things we have to offer is the ISU scientific community. It complements the Lab very well." ∎

~ Saren Johnston

Brett Bode says an additional benefit of the SC conference is the chance it affords student attendees to meet members of the high-performance computing community.